

KEWANEE



NEW SCOTTIE JUNIOR

small but
ECONOMICAL



Portable
Return Tubular

SCOTCH MARINE BOILER

FOR HIGH PRESSURE STEAM

SIX JUNIOR SIZES

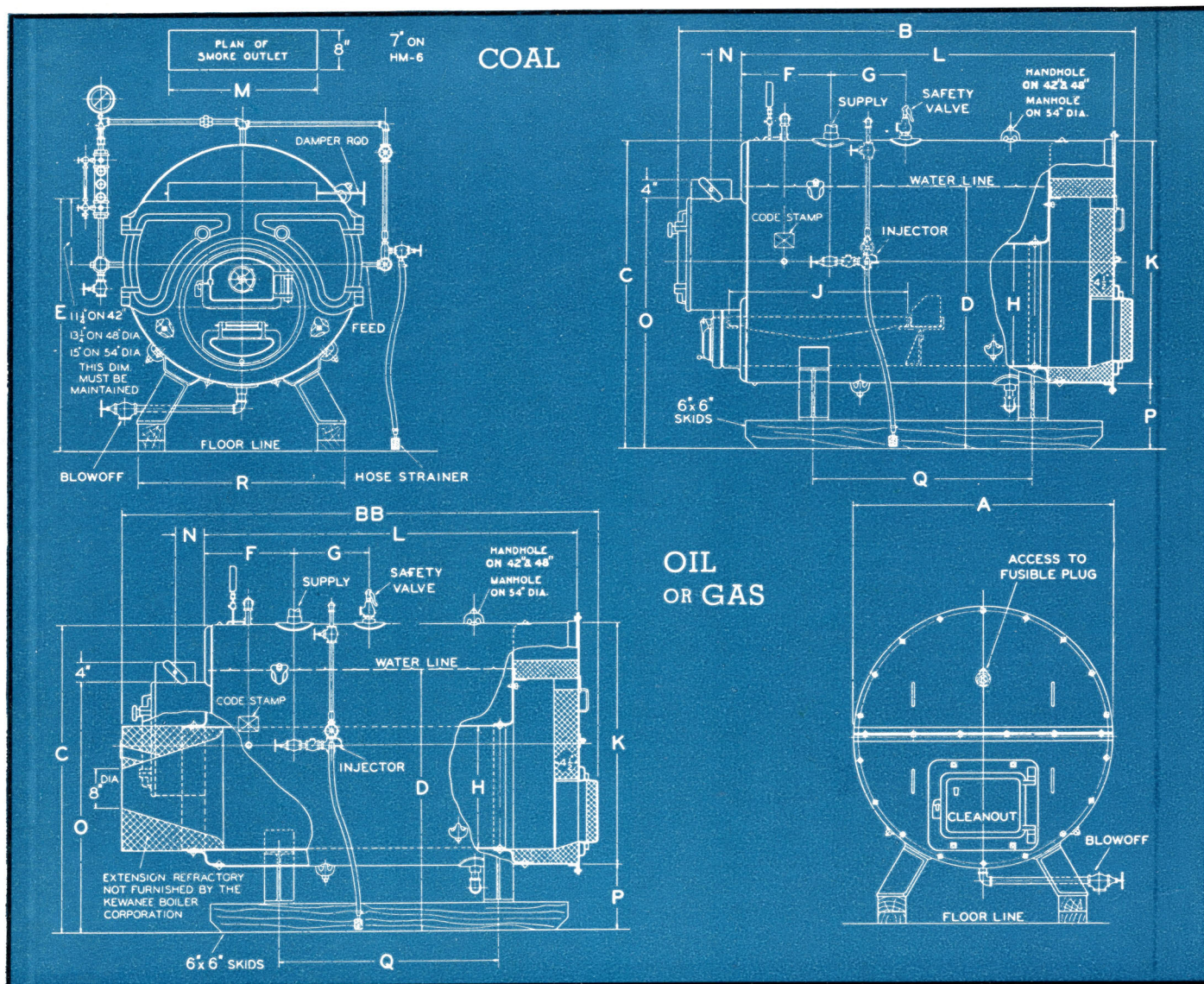
KEWANEE has built real 'steel-riveted' Quality into this Scotch Marine Style Boiler. Approved Materials of the stoutest character only, fabricated in well-balanced Proportions betoken the very best commercial Performance by this well authenticated design, backed up with a high degree of Serviceable Efficiency.

SCOTTIE JUNIOR is conveniently compact in make-up, yet easily accessible. With nominal operating care on the part of the average attendant it will be found to respond readily to normal day by day demands and carry extra heavy overloads as well, burning any fuel.

KEWANEE BOILER CORPORATION
Division of AMERICAN RADIATOR & Standard Sanitary CORPORATION

KEWANEE, ILLINOIS Eastern District
Office, 40 West 40th St., New York City 18

CATALOG 99d



KEWANEE Return Tube SCOTCH MARINE BOILER

SPECIFICATIONS NEW

Boiler Number	HM 6	HM 9	HM 15	HM 20	HM 25	HM 30
Horse Power	6	9.9	15	20	25	30
Working Pressure	100	100	100	100	100	100
Rating—Steam Radiation	840	1400	2100	2800	3500	4200
Heating Surface	60	99	150	200	250	300
Grate Area	3.5	4	6	8	10	12
K—Shell Diameter	42	48	48	48	54	54
L—Length	61	63	84	105	105	122
H—Furnace Diameter	21	24	24	24	28	28
J—Grate Length	24	24	36	48	54	60
Steam Supply Size	2	2	2	2	2	3
Blow-off Size	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2
Safety Valve Size						
Coal, hand-fired	3/4	1	1 1/4	1 1/2	2	2 1/2
Oil or Gas	1	1 1/4	2	2 1/2	2 1/2	2
Stoker	1	1 1/4	1 1/2	2	2 1/2	2
Fire Door Opg. Width	15	16	16	16	18	18
Height	10	11	11	11	12	12
Ash Door Opg. Wdt. x Hgt.	15x6 1/4	16x6 1/2	16x6 1/2	16x6 1/2	18x7 1/2	18x7 1/2
Breeching Diameter	14	16	17	19	20	22
Stack Diameter	12	16	15	17	18	20
Height	30	35	40	40	40	45
Outside Surface to Cover	57	67	90	111	125	145
Shipping Weight—						
On Skids with Regular						
Fixtures, less Stack	3700	4800	6300	7000	7800	8500

A.S.M.E. CODE NEW High Pressure Steam

Boiler Number	HM 6	HM 9	HM 15	HM 20	HM 25	HM 30
A—Boiler Width Overall	47	53	53	53	59	59
B—Length Overall, hand-fired	77 1/2	80	101	122	123	140
BB—Length Overall, oil-gas	82 1/2	84 1/2	105 1/2	126 1/2	127	144
C—Height Overall Shell	54 1/2	62	62	62	67 1/2	67 1/2
D—Water Line	46 1/2	53	53	53	57 1/2	57 1/2
E—Water Column Height	44 1/2	51	51	51	55 1/2	55 1/2
F—Steam Supply Location	13	14	18	24	18	24
G—Safety Valve Location	15	15	15	16 1/2	22 1/2	16 3/4
M—Breeching Connection	24	30	30	30	38	38
N—Location	5 1/2	6	6	6	7 1/2	7 1/2
O—Height	44 1/4	50	50	50	54 1/2	54 1/2
Clearance Beneath Shell	12	13 1/4	13 1/4	13 1/4	13	13
Q—Legs Location	38 1/2	39 1/2	43	61	60	77
R—Skids Location	37 1/2	42	42	42	45	45
Plate Thickness—Shell	5/16	5/16	5/16	5/16	5/16	5/16
—Heads	3/8	7/16	7/16	7/16	7/16	7/16
—Furnace	3/8	3/8	3/8	7/16	15/32	17/32
Return Tubes—Number	16	28	28	28	36	36
—Diameter	3	3	3	3	3	3
—Length	40	42	63	84	83	100
Steel Smoke Stack—Gauge No.	14	14	14	14	12	12
at extra cost. —Diameter	12	14	15	17	18	20
—Length	30	35	40	40	40	45
—Weight	350	450	550	650	1000	1200

EQUIPMENT—All Boilers mounted on skids; equipped with Handholes; Manhole in 54" boilers only; Smokebox with Damper; Insulated Flue Doors; Refractory lined rear Combustion Chamber; Rear End Plate with cleanout door; 3/4" Fusible Plug Socket Wrench; Flue Scraper with handle.

TRIMMINGS—All Steam Boilers: Cast Iron Water Column with standard Gauge Glass Cocks, Gauge Glass, Guards, three Try-cocks; Steam Gauge, Syphon and Cock; Safety Valve; 3/4" Penberthy Injector; Blow-off Valve; Piping and Fittings for attaching trimmings to boiler.

No trimmings furnished with hot water boilers.

No Mechanical firing equipment included.

COAL Hand-fired—Cast iron Furnace front with Firedoor and Liner; Ash Door with Ratchet Draft door; Stationary Grates and Supports; Refractory Bridgwall; Hoe, Poker.

OIL or GAS Fired—Steel Furnace extension with coverplate and peephole.

STOKER Fired—Furnace Front with doors NOT furnished by K. B. Corp.

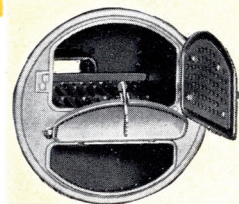
KEWANEE

SCOTTIE JUNIOR

REG. U. S. PAT. OFF.



CH. HALLCREST BLACK LANCER



80 years old traditions of the Scotch Marine Type plus the 75 years prestige of Kewanee in the Steel Boiler Industry are fully evidenced in **Scottie Junior** Models. And as a result of these decades of practical experience, wherever steam is needed—whether it be for Power, Heat or Processing,—the client can depend upon getting Utmost Value measured in Net Output for the money he will spend firing-up even one of these small size high pressure Boilers sponsored by Kewanee, just like lifelong customers do with batteries of the biggest.

SCOTTIE JUNIOR may be described as a self-contained, internally-fired cylindrical steam generator. The furnace extends full length from Front to Rear Head well below the water level under the Return Tubes, its entire circumference is surrounded by water. A bottom blow-off keeps the water clean.

The low upkeep cost in a KEWANEE SCOTTIE JUNIOR is accounted for by our adherence to those Straightforward standards for Strength and Durability which have stood the test of time.

SALIENT FEATURES

SHELL, constructed of Flange Steel 55,000–65,000 lbs. sq. in. Tensile Strength. Cylindrical shape takes up internal pressure stresses without excess weight. Longitudinal Joint Double-Riveted with Double Butt Strap reinforcement.

HEADS Hot Flanged in homogeneous Firebox quality Steel. Holes trepanned from solid plate for 3" 12 ga. high quality seamless steel **TUBES**. Girth Seams Riveted and Caulked tight around the shell edges and at each end of the electric fusion welded Firebox Steel Furnace. Solid thru **Stays** above complete the Front-to-Rear bracing.

ALL CASTINGS and equipment are extra substantial to withstand whatever burdens may be expected in ordinary usage. Fire and Ashpit Doors are **oversize** for handy access. **Handholes** are provided, and a **Manhole** on 25 and 30 H.P. sizes. A thorough factory check-over is given at hydrostatic test pressure of 150 lbs. sq. in. . . . Generous Safety Factors 5 to 1 or more allowed in every detail of design . . . Each boiler is stamped by the National Board official Inspector.

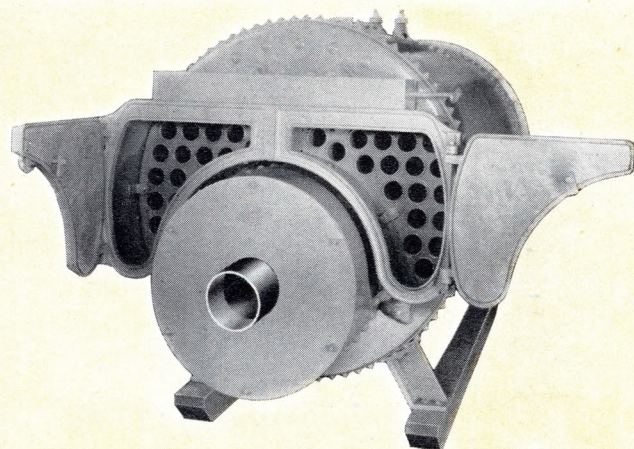
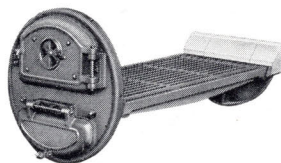
The sum total of those qualities offers any User of high pressure steam for industrial purposes a **Highly Efficient Junior size Boiler** with Large Capacity for hard work within a small area.

Each carries all the accessories fully set-up. The Legs are removable or reversible to suit any setting. However, a foundation is not necessary because the boiler comes mounted on wood skids.

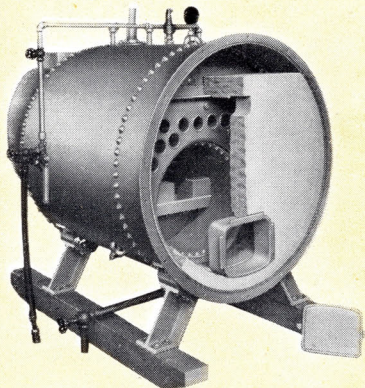
That means the Scottie delivers from Stock ready to **PIPE TO THE MAIN** at least possible installation expense.

City and State Laws are specifically conformed to. No licensed operator needed on 6 and 9.9 H.P. sizes.

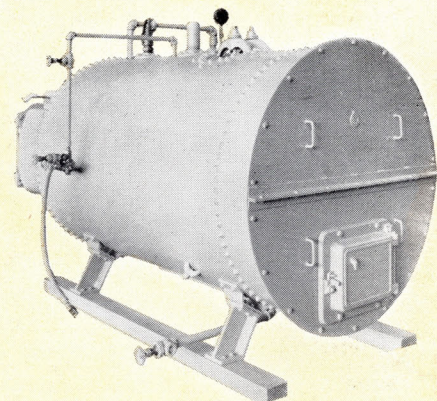
COAL GRATES are stationary . . . No movable part replacements. Firedoor protected by liner shown top of page has air swivel and ash door has ratchet for adjusting draft. Chain latch can hold both wide open.



Kewanee Scottie Junior is adapted for Oil or Gas firing by means of front Furnace extension for nozzle refractory. Its longer furnace and high combustion chamber create ideal flame conditions in automatic firing with Gun Burners. Cast Iron doors insulated against heat loss swing wide open on their front smokebox frame for handier flue cleaning.

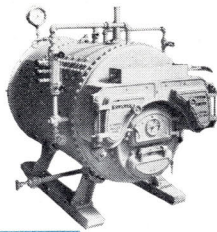


Rear Combustion Chamber needs no brick-up work . . . Bridgwall and precast Refractory hi-temperature insulation block is fitted in at the Factory.



Rear cleanout door is rugged and sizeable. Access to fusible plug is provided without removing entire dry-back plate.

SCOTTIE
NEW SMALLER



JUNIOR
SIX HP SIZE

Heavy Duty

Hi Pressure

KEWANEE

BOILERS

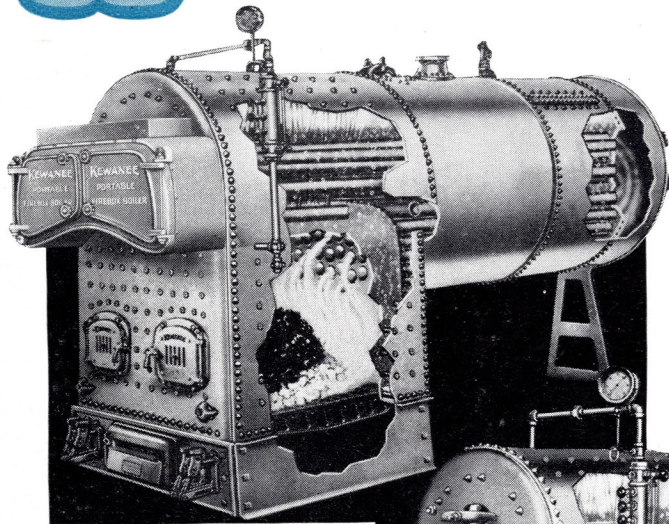
RIVETED FIREBOX

For High Pressure Steam up to 150 lbs.
and for loads up to 300 Horse Power.

Records of many years' standing prove the dependability of Kewanee workmanship, and the High Efficiency in boiler design with any fuel. Hand or Mechanically Fired.

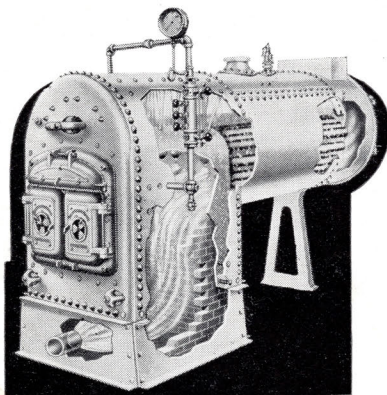
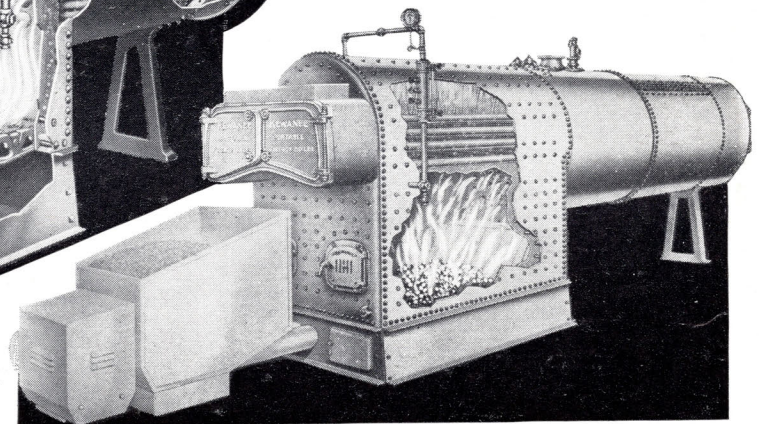
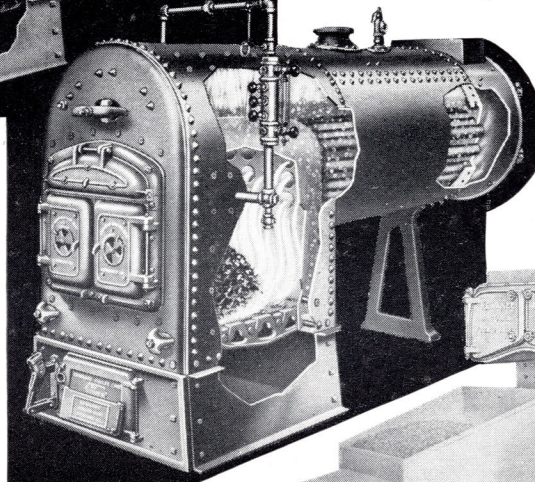
Kewanee High Pressure Firebox Boilers conform to the A.S.M.E. Power Boiler Code for construction 100-125-150 lbs., and for rating with S.B.I. Simplified Practice.

Expert engineering service on all boiler proposals is offered at Kewanee's 60 branch offices.



Kewanee Firebox Boilers for 100-125-150 lbs. Steam Working Pressure.

Cut-aways show "500" Series and Type "K" for hand-fired Coal and for Mechanical Firing with Oil or Gas or Stoker.



KEWANEE TYPE K FIREBOX

Number	4K	5K	6K	8K	9K	10K	11K	12K
Rating—Steam Radiation..... sq. ft.	1380	1800	2200	3000	3500	4000	4500	5000
—Horse Power, hand fired	10	13	16	22	25	29	32	36
Oil, gas or stoker	14	16	19	26	30	35	39	44
Heating Surface (SBI Code Min)..... sq. ft.	119	129	158	215	250	286	322	358
Grate Area (SBI Code Min)..... sq. ft.	6.8	7.9	8.9	10.5	11.4	12.2	13.4	14.5
A—Boiler Diameter..... in.	36	36	36	42	42	48	48	48
B—Boiler Length..... ft. in.	8-10	10-4	11-10	11-4	12-10	11-10 $\frac{1}{2}$	13-4 $\frac{1}{2}$	14-10 $\frac{1}{2}$
C—Boiler Head Height..... in.	65 $\frac{1}{2}$	65 $\frac{1}{2}$	65 $\frac{1}{2}$	71	71	77 $\frac{1}{2}$	77 $\frac{1}{2}$	77 $\frac{1}{2}$
D—Water Line..... in.	57	57	57	60	60	63	63	63
Shipping Weight—100 lbs. W.P..... lbs	4200	4500	5500	6500	7500	8000	9000	9500
—125 lbs. W.P..... lbs	4800	5000	6500	7500	8500	9000	10500	11000
—150 lbs. W.P..... lbs	5300	5500	7000	8500	9500	10000	11500	12000

KEWANEE "500" SERIES FIREBOX

No.	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590
Rating—Steam Radiation..... sq. ft.	3500	4000	4500	5000	6000	7000	8500	10000	12500	15000	17500	20000	25000	30000	35000
—Horse Power, hand fired	25	29	32	36	43	50	61	72	89	107	125	143	179	214	250
Oil, gas or stoker	30	35	39	44	52	61	74	87	109	130	152	174	217	261	304
Heating Surface (SBI Code Min)..... sq. ft.	250	286	322	358	429	500	608	715	893	1072	1250	1429	1786	2143	2500
Grate Area (SBI Code Min)..... sq. ft.	11.4	12.2	13.4	14.5	16.4	18.1	20.5	22.5	25.6	28.4	30.9	33.2	37.4	41.2	44.7
A—Boiler Diameter..... in.	42	42	48	48	54	54	60	60	66	66	72	78	78	84	84
B—Boiler Length..... ft. in.	8-7	9-6 $\frac{1}{2}$	8-11 $\frac{1}{2}$	9-8	9-2 $\frac{1}{2}$	10-6	11-1	12-9	12-10	14-9	14-9	14-9	17-7 $\frac{1}{2}$	17-9 $\frac{1}{2}$	20-0 $\frac{1}{2}$
C—Boiler Head Height..... in.	80 $\frac{1}{2}$	80 $\frac{1}{2}$	86 $\frac{1}{2}$	86 $\frac{1}{2}$	94 $\frac{1}{2}$	94 $\frac{1}{2}$	102	102	108	108	114	116	116	126	126
D—Water Line..... in.	73	73	76	76	83	83	88	88	93	93	97 $\frac{1}{2}$	100	100	108	108
Shipping Weight—100 lbs. W.P..... lbs.	7500	8000	9000	9500	11000	12000	14000	15500	18000	20500	22500	25000	29000	32500	36000
—125 lbs. W.P..... lbs.	8500	9000	10500	11000	12500	14000	16000	18000	20500	23500	26000	29000	33500	37500	41500
—150 lbs. W.P..... lbs.	9500	10000	11500	12000	14000	15500	17500	20000	22500	26000	28500	32000	37000	41000	45500